REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1, 3-13 and 15-23 are currently pending. Claims 1, 6, 8-11, 15-17, 20-21 and 23 are amended, and Claim 14 is cancelled without prejudice or disclaimer. The changes to the claims are supported by the originally filed specification and do not add new matter.

In the outstanding Office Action, the specification was objected to; Claims 1, 3-8, and 11-14 were rejected under 35 U.S.C. §112, first and second paragraphs; Claims 1, 6-7, 9-10, 17 and 21-22 were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. 2007/0136748 (Rodriguez) in view of U.S. 2003/0065794 (Akazawa) and U.S. 6,728,698 (Yen); Claims 3, 4, 18 and 19 were rejected under 35 U.S.C. §103(a) as unpatentable over Rodriguez, Akazawa and Yen in view of U.S. 6,760,917 (De Vos); Claims 5 and 20 were rejected under 35 U.S.C. §103(a) as unpatentable over Rodriguez, Akazawa, Yen and De Vos in view of U.S. 6,243,145 (Schlarb) and U.S. 2001/0014876 (Miyashita); Claims 8 and 23 were rejected under 35 U.S.C. §103(a) as unpatentable over Rodriguez, Akazawa, Yen, Schlarb and Miyashita; Claims 11, 12, 15 and 16 were rejected under 35 U.S.C. §103(a) as unpatentable over Rodriguez, Akazawa, De Vos and Miyashita; Claim 13 was rejected under 35 U.S.C. §103(a) as unpatentable over Rodriguez, Akazawa, De Vos, Schlarb and Miyashita; and Claim 14 was rejected under 35 U.S.C. §103(a) as unpatentable over Rodriguez, Akazawa, De Vos, Schlarb and Miyashita; and Claim 14 was rejected under 35 U.S.C. §103(a) as unpatentable over Rodriguez, Akazawa, De Vos, Yen and Miyashita.

Initially, as to the objection to the specification the Office Action alleges there is no mention of a "computer readable storage medium" in the specification. Applicant respectfully disagrees. A computer-readable storage medium is shown throughout the drawings, including Figs. 6, 9, 10 and 20. Of note, Fig. 10 is a block diagram showing a

hardware structure for a computer, including a hard disk drive 75 and a ROM 73 provided as a recording medium.¹ Further, the specification recites

[p]rograms may be stored temporarily or permanently on a removable recording medium 81 such as flexible disks, CD-ROM (compact disc read only memory), MO (magneto-optical) disks, DVD (digital versatile disk), magnetic disks, or a semiconductor memory. These types of removable storage medium 81 may be offered as so-called package software.²

Each of the above-noted storage devices is computer-readable, as clearly shown in Fig. 10. Therefore, it is respectfully submitted the specification and the drawings describe a computer-readable medium, as recited in the claims.

Further, as to the rejections under 35 U.S.C. §112, first and second paragraphs, at least the above noted portions of this application should be considered when considering the 35 U.S.C. §112, sixth paragraph, elements of Claims 1, 3-8, and 11-14. The Office Action alleges the claimed means-plus-function language lacks adequate support in the specifications and the drawings. Applicant respectfully disagrees.

It does not appear the claims have been examined properly in light of 35 U.S.C. §112, sixth paragraph, which states:

"[a]n element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof."

Therefore, proper claim interpretation of a means-plus-function element entails consideration of the *structures disclosed in the specification* and equivalents thereof. To this extent, the specification and drawings describe several aspects of hardware, including TV sets and computers (e.g. servers) to perform the exemplary processes outlined in the specification and the drawings. Such exemplary processes are shown in Figs. 11 and 16-19.

¹ Published Application, paragraphs [0093] to [0100].

² Published Application, paragraph [0096].

³ 35 U.S.C. §112, sixth paragraph (emphasis added).

Consequently, it is improper for the Examiner to interpret the claimed means-plusfunction elements as an abstract idea or descriptive material *per se*.

For the Examiner's convenience, portions of the MPEP are reproduced below which offer guidance for examination in light of 35 U.S.C. §112, sixth paragraph. In determining the scope of the claims prior to determining compliance with each statutory requirement for patentability, MPEP § 2106 provides:

Where means plus function language is used to define the characteristics of a machine or manufacture invention, such language must be interpreted to read on only the structures or materials disclosed in the specification and "equivalents thereof" that correspond to the recited function. Two en banc decisions of the Federal Circuit have made clear that the USPTO is to interpret means plus function language according to 35 U.S.C. § 112, sixth paragraph. In re Donaldson, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994) (en banc); In re Alappat, 33 F.3d 1526, 1540, 31 USPQ2d 1545, 1554 (Fed. Cir. 1994) (en banc).

Disclosure may be express, implicit, or inherent. Thus, at the outset, USPTO personnel must attempt to correlate claimed means to elements set forth in the written description that perform the recited step or function. The written description includes the original specification and the drawings and USPTO personnel are to give the claimed means plus function limitations their broadest reasonable interpretation consistent with all corresponding structures or materials described in the specification and their equivalents including the manner in which the claimed functions are performed. See Kemco Sales, Inc. v. Control Papers Company, Inc., 208 F.3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000). Further guidance in interpreting the scope of equivalents is provided in MPEP § 2181 through § 2186.

It is respectfully submitted the above-noted portions of this application satisfy the written description requirement and the definitiveness requirements for the means-plus-function limitations recited in the claims. Should the Examiner disagree, the Examiner is encouraged to contact the undersigned to resolve this issue. Otherwise, it is respectfully submitted the rejections under 35 U.S.C. §112, first and second paragraphs, are improper and should be withdrawn.

As to the rejections under 35 U.S.C. § 103(a), Claim 1 recites:

A communication system, comprising: a data processing apparatus configured to receive and process data; and

a data providing apparatus configured to provide data to said data processing apparatus, wherein said data processing apparatus includes means for displaying first buttons representing executable functions in a first display format while displaying second buttons representing optional functions in a second display format, and for displaying a download button requesting to download software executing a function represented by one of the second buttons in response to selecting the one of said second buttons,

means for executing a function associated with one of said first buttons in response to an actuation of one of the first buttons,

means for downloading said software provided by said data processing apparatus when said download button is actuated,

means for updating a display of the one of the second buttons representing the function implemented by execution of the downloaded software by displaying the one of the second buttons in said first display format in response to said software being downloaded, and

means for displaying a new second button representing a new function corresponding to new function information, and wherein said data providing apparatus includes

means for receiving said download request for said software from said data processing apparatus,

means for transmitting said software to said data processing apparatus in response to said download request for said software, and means for transmitting information of a new function to said data processing apparatus when software exists for executing the new function.

[Emphasis added].

As emphasized above in Claim 1, the data processing apparatus displays first buttons and second buttons in respective first and second button formats. In response to selecting a second button, a download button is displayed. The download button requests to download software executing a particular function represented by the second button. The data processing apparatus downloads the software when the download button is actuated, and the display is updated by displaying the second button in the first display format in response the software being downloaded. It is respectfully submitted the cited references fail to disclose or reasonably suggest these features.

The Office Action alleges <u>Rodriguez</u> describes a displaying first buttons in a first display format and second buttons in a second display format.⁴ Applicant respectfully disagrees.

Rodriguez merely describes a set of buttons (Sisters, Story Of Us, etc.) in a list 103. Each of these buttons, though, is shown in the same display format. Rodriguez describes highlighting a button (105) to show that a particular button is *selected*, and then once that button is actuated, a user is directed to a secondary screen with further details and options. This same functionality is described in the Office Action. However, each of the set of buttons in the list 103 is shown in the same format. On the other hand, Claim 1 recites first buttons in a first format and second buttons in a second format - offering a visual discrimination between the first and second buttons. Therefore, it is respectfully submitted Rodriguez is deficient in describing or reasonably suggesting the features relied upon in the Office Action.

Additionally, the first and second buttons recited in Claim can be selected, and in response to selecting one of the second buttons, a download button is displayed. The Office Action acknowledges <u>Rodriguez</u> is silent regarding this feature, and relies instead on <u>Akazawa</u>.

Akazawa shows an image of a display, which includes various information and buttons. In that image, a user is able to actuate a download button B4 or a display button B5. However, Akazawa does not display either of buttons B4 or B5 in response to the *selection* of another button (e.g., a second button according to Claim 1). Rather, Akazawa describes displaying the image including buttons B4 and B5 in response to a user authentication

⁴ Office Action, page 6 (citing Fig. 5 of Rodriguez).

⁵ Rodriguez, paragraph [0047].

⁶ Rodriguez, Fig. 8.

⁷ Office Action, page 6.

⁸ A non-limiting example is shown in Fig. 12, which shows the first buttons as solid-line executable buttons and second buttons as dashed-line optional buttons.

Akazawa, Fig. 7.

process (i.e. successful ID and password authentication). ¹⁰ Therefore, it is respectfully submitted <u>Akazawa</u> is also deficient in describing or reasonably suggesting the features relied upon in the Office Action.

None of the other cited references overcome the above-noted deficiencies of <u>Akazawa</u> and <u>Rodriguez</u>. Therefore, it is respectfully submitted Claim 1 is allowable over the art of record.

Although varying in scope and/or directed to different statutory classes, Claims 6, 9, 10, 17 and 21 are also allowable over the art of record for substantially the same reasons noted above regarding Claim 1. Therefore, it is respectfully submitted the rejection of Claims 1, 6, 9, 10, 17 and 21 (and any claims depending therefrom) should be withdrawn.

Regarding the rejection of Claims 11, 15 and 16, Claim 11 recites:

A data providing apparatus for providing data to a data processing apparatus which receives and processes said data, said data providing apparatus comprising:

means for receiving a download request for *executable* software from said data processing apparatus;

means for transmitting said software to said data processing apparatus in response to said download request for said software;

means for creating a download history regarding said software downloaded by said data processing apparatus;

means for performing a relevant process in keeping with said download history, including means for recognizing a category of software downloaded by said data processing apparatus with high frequency based on said download history; and

means for transmitting information of a new function which is not performed by said data processing apparatus to said data processing apparatus when new software exists for executing the new function.

[Emphasis added].

As emphasized above, Claim 11 recites transmitting information of a new function which is not performed by a data processing apparatus to the data processing apparatus when

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¹⁰ Akazawa, paragraph [0046].

new software exists for executing the new function. The Office Action alleges <u>Akazawa</u> describes this feature. 11 Applicant respectfully disagrees.

The relied on sections of <u>Akazawa</u> are silent regarding functions which are new to an apparatus. Rather, the relied upon sections of <u>Akazawa</u> merely describe the downloading of data, which is accessed and/or read by existing functions of the apparatus. In other words, the downloaded data (e.g., a PDF)¹² is not executable, as required by Claim 11, and does not provide functionality to the apparatus. On the other hand, it is merely data read by an existing functionality of the apparatus.

None of the other cited references overcome the above-noted deficiencies of Akazawa. Therefore, it is respectfully submitted Claim 11 is allowable over the art of record.

Although varying in scope and/or directed to different statutory classes, Claims 15 and 16 are also allowable over the art of record for substantially the same reasons noted above regarding Claim 11. Therefore, it is respectfully submitted the rejection of Claims 11, 15 and 16 (and any claims depending therefrom) should be withdrawn.

¹² Akazawa, paragraph [0057].

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Office Action at page 24 (citing Akazawa, paragraphs [0047], [0054] and [0057]).

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Consequently, in view of the present amendment and in view of the above discussion, the outstanding grounds for rejection are believed to have been overcome. The application as amended herewith is believed to be in condition for formal allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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